

## Chronic Disease Indicators: Indicator Definition



### **Mortality with chronic obstructive pulmonary disease among adults aged 45 years and older**

Category:	Other Diseases and Risk Factors
Demographic Group:	Resident persons aged $\geq 45$ years.
Numerator:	Deaths with International Classification of Diseases (ICD)-10 code J40-J47 (ICD-9 code 490-496) as the underlying or contributing cause of death among resident persons aged $\geq 45$ years during a calendar year.
Denominator:	Midyear resident population aged $\geq 45$ years for the same calendar year.
Measures of Frequency:	Annual number of deaths. Annual mortality rate — crude and age-adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 1*) — with 95% confidence interval.
Time Period of Case Definition:	Calendar year.
Background:	In 2000, chronic obstructive pulmonary disease (COPD) caused approximately 120,400 deaths in the United States. Mortality from COPD has increased by 40% in the past 2 decades. COPD affects approximately 6% of the general U.S. population.
Significance :	Elimination of tobacco use is the most effective way to reduce COPD because approximately 90% of COPD is attributable to smoking. Other risk factors for COPD include occupational exposure and ambient air pollution.
Limitations of Indicator:	Because COPD is a chronic disease, years might pass before changes in behavior or clinical practice affect population mortality. Other surveillance reports have used different groupings of ICD rubrics to define COPD. The accuracy of the listing of the cause of death for chronic lung diseases, including COPD and asthma, might be low, especially among decedents aged $\geq 35$ years.
Data Resources:	Death certificate data from vital statistics agencies (numerator) and population estimates from the U.S. Bureau of the Census or suitable alternative (denominator). <a href="http://wonder.cdc.gov/">http://wonder.cdc.gov/</a>
Limitations of Data Resources:	Causes of death and other variables listed on the death certificate might be inaccurate. The number of contributing causes of death listed on the death certificate might vary by person completing the death certificate and geographic region.
Healthy People 2010 Objectives:	24-10: Reduce deaths from COPD among adults.

\* See Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics, 2001. Healthy people 2010 statistical notes, no. 20. <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>